

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strike through~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claims 2, and 13 without prejudice or disclaimer, and AMEND claims 1, 3, 7, 12, 14-19, 21-24, and 26-27 in accordance with the following:

1. (currently amended) An information retrieving system for retrieving design/manufacturing information of a great variety of file formats registered in a plurality of web servers, by using an index server, said information retrieving system comprising:

a transmitting unit that transmits an abstract and storage location information of design/manufacturing information registered in said web servers, to an index server during an idle time of the web servers; and

an automatic registering unit that automatically registers the abstract and storage location information transmitted from said web servers by said transmitting unit, into said index server, wherein

said transmitting unit is a register processing agent that includes an abstract generating unit for generating an abstract from a text sentence of the design/manufacturing information and transmits the abstract and storage location information of the design/manufacturing information.

2. (cancelled)

3. (currently amended) The information retrieving system according to claim 21, wherein said transmitting unit includes,

~~an abstract generating unit that generates an abstract of the design/manufacturing information;~~

a storage location information generating unit that generates storage location information showing a storage location of the design/manufacturing information; and

an information transmitting unit that transmits an abstract generated by said abstract generating unit and storage location information generated by said storage location information generating unit respectively, to said index server during an idle time of said web servers.

4. (original) The information retrieving system according to claim 3, wherein said abstract

generating unit converts the design/manufacturing information into a text, and then converts this text into an XML format, thereby to generate an abstract of the text and the XML format.

5. (original) The information retrieving system according to claim 3, wherein said storage location information generating unit generates URLs as addresses of said web servers on the Internet.

6. (original) The information retrieving system according to claim 3, wherein said information transmitting unit further includes,
a first repository that stores an abstract generated by said abstract generating unit and storage location information generated by said storage location information generating unit, and transmits the abstract and the storage location information stored in the first repository to said index server during an idle time of said web servers.

7. (currently amended) The information retrieving system according to claim 21, wherein said automatic registering unit is a registration accept processing agent that automatically registers the abstract and the storage location information transmitted from said web servers by said transmitting unit, to said index server.

8. (original) The information retrieving system according to claim 7, wherein said automatic registering unit includes,
a second repository that stores an abstract and storage location information of the design/manufacturing information that have been transmitted from said transmitting unit;
a storage unit that stores the abstract and the storage location information of the design/manufacturing information into the second repository during an idle time of said index server;
an ontology restructuring unit that restructures the consistency of the ontology of a hierarchical structure relating to the design/manufacturing information; and
a posting unit that posts to said web servers a message that an abstract and storage location information of the design/manufacturing information have been stored in said second repository.

9. (original) The information retrieving system according to claim 8, wherein the abstract and the storage location information of the design/manufacturing information are transferred between said first repository and said second repository by inter-repository communications.

10. (original) The information retrieving system according to claim 1, further comprising an overview unit that has a birds-eye view of the design/manufacturing information based on an abstract and storage location information of the design/manufacturing information registered in said index server.

11. (original) The information retrieving system according to claim 1, further comprising a retrieving unit that retrieves design/manufacturing information based on an abstract and storage location information of the design/manufacturing information registered in said index server.

12. (currently amended) An information retrieving method for retrieving design/manufacturing information of a great variety of file formats registered in a plurality of web servers, by using an index server, the information retrieving method comprising:

a transmission step-operation of transmitting an abstract and storage location information of design/manufacturing information registered in said web servers, to an index server during an idle time of said web servers; and

an automatic registration step-operation of automatically registering the abstract and storage location information transmitted from web servers by said transmitting unit, into said index server, wherein

said transmission operation includes operations of generating an abstract from a text sentence of the design/manufacturing information by a register processing agent and transmitting the abstract and storage location information of the design/manufacturing information by a register processing agent.

13. (cancelled)

14. (currently amended) The information retrieving method according to claim ~~13~~12, wherein the transmission step-operation includes, ~~an abstract generation step of generating an abstract of the design/manufacturing information;~~ a storage location information generation step-operation of generating storage location information that shows a storage location of the design/manufacturing information; and an information transmission step-operation of transmitting an abstract generated at the abstract generation step-operation and storage location information generated at the storage location information generation step-operation, to said index server during an idle time of said web servers.

15. (currently amended) The information retrieving method according to claim 14,

wherein the abstract generation step-operation is for converting the design/manufacturing information into a text, and then converting this text into an XML format, thereby to generate an abstract of the text and the XML format.

16. (currently amended) The information retrieving method according to claim 14, wherein the storage location information generation step-operation is for generating URLs as addresses of said web servers on the Internet.

17. (currently amended) The information retrieving method according to claim 14, wherein the information transmission step-operation further includes,
a storage step-operation of storing into a first repository an abstract generated at the abstract generation step-operation and storage location information generated at the storage location information generation step-operation respectively,
wherein, at the information transmission step-operation, the abstract and the storage location information stored in the first repository are transmitted to said index server during an idle time of said web servers.

18. (currently amended) The information retrieving method according to claim 4312, wherein the automatic registration step-operation is a step-operation at which a registration accept processing agent automatically registers the abstract and the storage location information transmitted from said web servers at the transmission step-operation, to said index server.

19. (currently amended) The information retrieving method according to claim 18, wherein the automatic registration step-operation includes,
a storage step-operation of storing an abstract and storage location information of the design/manufacturing information into a second repository during an idle time of said index server;
an ontology restructuring step-operation of restructuring the consistency of the ontology of a hierarchical structure relating to the design/manufacturing information; and
a posting step-operation of posting to said web servers a message that an abstract and storage location information of the design/manufacturing information have been stored in the second repository.

20. (original) The information retrieving method according to claim 19, wherein the abstract and the storage location information of the design/manufacturing

information are transferred between the first repository and the second repository by inter-repository communications.

21. (currently amended) The information retrieving method according to claim 12, further comprising an overview step-operation of having a birds-eye view of the design/manufacturing information based on an abstract and storage location information of the design/manufacturing information in said index server.

22. (currently amended) The information retrieving method according to claim 12, further comprising a retrieval step-operation of retrieving design/manufacturing information based on an abstract and storage location information of the design/manufacturing information registered in said index server.

23. (currently amended) An information retrieving method for retrieving design/manufacturing information of a great variety of file formats registered in a plurality of web servers, by using an index server, the information retrieving method comprising:

a transmission step-operation of transmitting an abstract and storage location information of design/manufacturing information registered in said web servers, to an index server during an idle time of said web servers; and

an automatic registration step-operation of automatically registering an abstract and storage location information transmitted from web servers by said transmitting unit, into said index server, wherein

said transmission operation includes operations of generating an abstract from a text sentence of the design/manufacturing information by a register processing agent and transmitting the abstract and storage location information of the design/manufacturing information by a register processing agent, and the information retrieving method is automatically carried out when registered information is dropped onto a registration icon prepared at the registration side.

24. (currently amended) An information retrieving method for retrieving design/manufacturing information of a great variety of file formats registered in a plurality of web servers, by using an index server, the information retrieving method comprising:

a transmission step-operation of transmitting an abstract and storage location information of design/manufacturing information registered in said web servers, to an index server during an idle time of said web servers; and

an automatic registration step-operation of automatically registering an abstract and

storage location information transmitted from web servers by said transmitting unit, into said index server, wherein

said transmission operation includes operations of generating an abstract from a text sentence of the design/manufacturing information by a register processing agent and transmitting the abstract and storage location information of the design/manufacturing information by a register processing agent,

said registered design/manufacturing information registered is managed in a repository based on a given drawing number system, and

when there is no suitable drawing number given, a drawing number of the registered information is automatically generated from a drawing number or an abstract in a higher-order system.

25. (previously presented) The information retrieving method according to claim 24, wherein an allocation of a flow diagram and a material of an IDEF based on a work process diagram at a retrieving time can be freely selected from a menu of the drawing number system.

26. (currently amended) An information retrieving method for retrieving design/manufacturing information of a great variety of file formats registered in a plurality of web servers, by using an index server, the information retrieving method comprising:

a transmission ~~step-operation~~ of transmitting an abstract and storage location information of design/manufacturing information registered in said web servers, to an index server during an idle time of said web servers; and

an automatic registration ~~step-operation~~ of automatically registering an abstract and storage location information transmitted from web servers by said transmitting unit, into said index server,

wherein said transmission operation includes operations of generating an abstract from a text sentence of the design/manufacturing information by a register processing agent and transmitting the abstract storage location information of the design/manufacturing information by a register processing agent, and

CAD design/manufacturing information, which includes at least one of a structure diagram of an ICAD-MX or a circuit diagram of the ICAD-MX is converted into text information, thereby to automatically generate an abstract.

27. (currently amended) A computer-readable recording medium recorded with a program for retrieving design/manufacturing information of a great variety of file formats registered in a plurality of web servers, by using an index server, the recording medium being

recorded with a program comprising:

a transmission ~~step~~operation of transmitting an abstract and storage location information of design/manufacturing information registered in said web servers, to an index server during an idle time of said web servers; and

an automatic registration ~~step~~operation of automatically registering an abstract and storage location information transmitted from web servers by said transmitting unit, into said index server, wherein

said transmission operation includes operations of generating an abstract from a text sentence of the design/manufacturing information by a register processing agent and transmitting the abstract and storage location information of the design/manufacturing by a register processing agent.